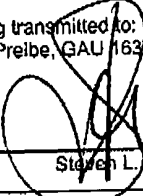


#34  
all  
5/1/03

CERTIFICATE OF FACSIMILE TRANSMISSION 37 C.F.R. § 1.8	
I hereby certify that this correspondence is being transmitted to: Commissioner for Patents, Washington, D.C. 20231, Attn: Examiner Scott Preibe, GAU 1632, facsimile number (703) 746-3131 on the date below:	
April 10, 2003 Date	 Steven L. Highlander

PATENT

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re Application of:  
Dennis E. HALLAHAN *et al.*

Serial No.: 08/540,343

Filed: October 6, 1995

For: METHODS AND COMPOSITIONS FOR  
VIRAL ENHANCEMENT OF CELL  
KILLING

Group Art Unit: 1632

Examiner: S. Priebe

Atty. Dkt. No.: ARCD:194/SLH

Official  
PTO FAX  
4/11/03  
SDIINVENTORS' DECLARATION UNDER 37 C.F.R. §1.131

Hon. Commissioner for Patents  
Washington, D.C. 20231

I, Ralph R. Weichselbaum, do declare that:

1. We are citizens of the United States and named inventors on the above-captioned application.
2. A combination herpesvirus-radiation treatment of human tumor cells was performed in this country before June 23, 1994. Attached to this declaration is an invention disclosure prepared and signed by two of the inventors that is dated prior to June 23, 1994 (date having been redacted).

Received 04/08/2003 16:08 in 01:18 on line [2] for SH01973 printed 04/08/2003 16:10 \* Pg 3/3

Apr-08-03 02:23P

P.03

3. We hereby declare that all statements made herein of our own knowledge are true, and that all statements made on information and belief are believed to be true, and further that these statements were made with the knowledge that willful false statements and the like so made are punishable by fine or imprisonment or both, under Section 1001 of Title 18 of the United States Code, and that such willful false statements may jeopardize the validity of the referenced patent application or any patent issued thereon.

4/8/03  
Date

  
Dr. Ralph Weichselbaum

\_\_\_\_\_  
Date

\_\_\_\_\_  
Dr. Dennis Hallahan

\_\_\_\_\_  
Date

\_\_\_\_\_  
Dr. Gregory Sibley

\_\_\_\_\_  
Date

\_\_\_\_\_  
Dr. Donald Kufe

\_\_\_\_\_  
Date

\_\_\_\_\_  
Dr. Bernard Roizman

3. We hereby declare that all statements made herein of our own knowledge are true, and that all statements made on information and belief are believed to be true, and further that these statements were made with the knowledge that willful false statements and the like so made are punishable by fine or imprisonment or both, under Section 1001 of Title 18 of the United States Code, and that such willful false statements may jeopardize the validity of the referenced patent application or any patent issued thereon.

\_\_\_\_\_  
Date

\_\_\_\_\_  
Dr. Ralph Weichselbaum

4/4/3  
\_\_\_\_\_  
Date

*D. Hallahan*  
\_\_\_\_\_  
Dr. Dennis Hallahan

\_\_\_\_\_  
Date

\_\_\_\_\_  
Dr. Gregory Sibley

\_\_\_\_\_  
Date

\_\_\_\_\_  
Dr. Donald Knfe

\_\_\_\_\_  
Date

\_\_\_\_\_  
Dr. Bernard Roizman

25280949.1

-2-

APR. 8. 2003 1:15PM  
Received 04/08/2003 13:59 in 00:50 on line [2] for SH01973 printed 04/08/2003 14:01 \* Pg 3/3 P.3  
NO. 049  
VUMC RADIATION ONCOLOGY

Received from <512 536 4598> at 4/10/03 5:55:45 PM [Eastern Daylight Time]

Received 04/03/2003 13:51 in 01:14 on line [3] for SH01973 printed 04/03/2003 13:53 \* Pg 3/3  
APR. 3.2003 2:45PM SIBLEY ONCOLOGY CT NO.097 P.3

3. We hereby declare that all statements made herein of our own knowledge are true, and that all statements made on information and belief are believed to be true, and further that these statements were made with the knowledge that willful false statements and the like so made are punishable by fine or imprisonment or both, under Section 1001 of Title 18 of the United States Code, and that such willful false statements may jeopardize the validity of the referenced patent application or any patent issued thereon.

\_\_\_\_\_  
Date

\_\_\_\_\_  
Dr. Ralph Weichselbaum

\_\_\_\_\_  
Date

\_\_\_\_\_  
Dr. Dennis Hallahan

\_\_\_\_\_  
Date

4/3/03

\_\_\_\_\_  
Dr. Gregory Sibley

\_\_\_\_\_  
Date

\_\_\_\_\_  
Dr. Donald Kufe

\_\_\_\_\_  
Date

\_\_\_\_\_  
Dr. Bernard Roizman

25280949.1

-2-

Received 04/10/2003 15:03 in 01:06 on line [4] for SH01973 printed 04/10/2003 15:10 \* Pg 3/3  
04/10/2003 16:15 6176322934 DR DON KUFÉ

PAGE 03

3. We hereby declare that all statements made herein of our own knowledge are true, and that all statements made on information and belief are believed to be true, and further that these statements were made with the knowledge that willful false statements and the like so made are punishable by fine or imprisonment or both, under Section 1001 of Title 18 of the United States Code, and that such willful false statements may jeopardize the validity of the referenced patent application or any patent issued thereon.

---

Date

---

Dr. Ralph Weichselbaum

---

Date

---

Dr. Dennis Hallahan

---

Date

---

Dr. Gregory Sibley

---

Date

4/10/03

---

Dr. Donald Kufe

---

Date

---

Dr. Bernard Roizman

25780909 1

2-

No Transmission Information Available in on line [0] for CJ10228 printed 04/04/2003 08:43 \* Pg 2/2  
04/03/2003 18:48 7021631 BERNAD ROIZMAN PAGE 02/02

3. We hereby declare that all statements made herein of our own knowledge are true, and that all statements made on information and belief are believed to be true, and further that these statements were made with the knowledge that willful false statements and the like so made are punishable by fine or imprisonment or both, under Section 1001 of Title 18 of the United States Code, and that such willful false statements may jeopardize the validity of the referenced patent application or any patent issued thereon.

\_\_\_\_\_  
Date

\_\_\_\_\_  
Dr. Ralph Weichselbaum

\_\_\_\_\_  
Date

\_\_\_\_\_  
Dr. Dennis Hallahan

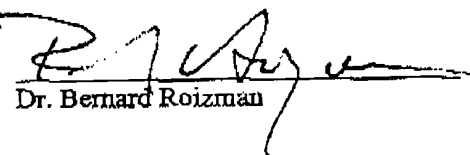
\_\_\_\_\_  
Date

\_\_\_\_\_  
Dr. Gregory Sibley

\_\_\_\_\_  
Date

\_\_\_\_\_  
Dr. Donald Kufe

April 4 2003  
Date

  
Dr. Bernard Roizman

04/02/2003 10:33 FAX 773 702 0741

UofC-UCTECH

002

DRAFT

ARCH Project Manager		University of Chicago		UCHI# 499
Confidential Invention Disclosure		Please print or type.		
1. TITLE OF INVENTION/SOFTWARE <i>Enhancement of radiation killing with viruses</i>				
2. INVENTOR(S)/Title*	Citizenship	Dept./Campus Address	Telephone #	
<i>Dennis Hallahan, MD</i>	<i>US</i>	<i>Radiation Onc</i>	<i>26819</i>	
<i>Ralph Weichselbaum, MD</i>	<i>US</i>	<i>Radiation Onc</i>	<i>26819</i>	
<i>Bernard Reizman</i>		<i>Virology</i>	<i>21898</i>	
* Please attach curriculum vitae				
3. DESCRIPTION OF INVENTION - Attach any additional information or background documentation. <i>HSV-1 mutants with 834.5 deleted are inoculated into human tumors and irradiated. The combination of virus and radiation is more cytotoxic than either agent alone.</i>				
4. DISCLOSURE RECORD	DATE	REFERENCES & COMMENTS		
		Use separate sheet if necessary or attach copy.		
A. First oral presentation of invention at seminars, meetings, conferences, etc.	<i>none</i>			
B. First publication, e.g. posters, articles, abstracts, seminars	<i>none</i>			
C. First successful demonstration, if any (reduction to practice)		<i>Lab notebooks</i>		
D. Other Publications to Date				
E. Anticipated Publications	<i>1</i>			

(over)

04/02/2003 10:34 FAX 773 702 0741

UofC-UCTECH

003

## 5. RESEARCH SUPPORT

A. Was the invention/discovery made in connection with any sponsored research? Yes ☐ No ☒  
Sponsor \_\_\_\_\_ Contract/Grant # \_\_\_\_\_ Amount/Percent \_\_\_\_\_

B. If no contract or grant, was there use of University funds or facilities? Yes ☒ No ☐

## 6. BACKGROUND RESEARCH AND PRIOR ART related to your invention: (See attached instructions)

- ☐ No relevant prior art exists  
☐ See attached description  
☒ See attached publications or references *Adeno associated virus*

## 7. RECORDS to substantiate your invention's history includes: (See attached instructions)

- ☒ Laboratory notes and records ☐ Idea only  
☐ Witnessed and Dated? ☐ Rough sketches/diagrams  
☐ Financial documents ☐ Finished, working drawings  
☐ Dated photographs ☐ Other

## 8. TESTING which has already been conducted includes:

- ☐ None  
☒ Functional testing of prototype to determine if it operates as intended  
☐ Market testing of invention

## 9. POTENTIAL LICENSEES

A. Please list any companies which you think may be interested in your invention.

Company	Address	Contact Person	Telephone #
<i>Gen Vac</i>			

## 10. TECHNICAL/MARKETING CONTACTS (See attached instructions)

Company	Address	Contact Person	Telephone #
---------	---------	----------------	-------------

## 11. SUBMITTED BY:

*Dennis Hallahan*  
Inventor's Signature \_\_\_\_\_ Date \_\_\_\_\_

*[Signature]*  
Co-Inventor's Signature \_\_\_\_\_ Date \_\_\_\_\_

Co-Inventor's Signature \_\_\_\_\_ Date \_\_\_\_\_

## DISCLOSED TO AND UNDERSTOOD BY:

Witness' Signature \_\_\_\_\_ Date \_\_\_\_\_

Witness' printed or typed name \_\_\_\_\_

## REVIEWED BY:

Department Head \_\_\_\_\_ Date \_\_\_\_\_

Printed or typed name \_\_\_\_\_



04/02/2003 10:34 FAX 773 702 0741

UofC-UCTECH

004

**THE UNIVERSITY OF CHICAGO  
CONFIDENTIAL INVENTION DISCLOSURE DOCUMENT**

**GUIDE FOR PREPARATION OF INVENTION DISCLOSURE**

Completing this confidential document is the first step toward protecting and commercializing your invention. After the invention disclosure is completed, it will be recorded and filed at the Technology Center. A copy will be sent to ARCH Development Corporation (ARCH). ARCH is a non-profit affiliate of the University, and is responsible for patents, licenses and the formation of new companies at the University and Argonne National Laboratory.

The following instructions refer to the correspondingly numbered sections on the attached document.

1. Disclose only one invention. Use a separate form for each invention.
2. In naming co-inventors and co-authors, be careful to include all of those who had a creative role in the invention or software development. However, do not add names to recognize others who were not inventors or authors. Either the omission of a co-inventor/author or the inclusion of a non-inventor/author could invalidate a patent or impair a copyright.
3. Use simple language to describe your invention and define technical terms.
4. If you have published or presented this invention previously, please submit copies.
  - (A) Oral presentation or publication to third parties more than one year before filing a U.S. patent application will preclude obtaining U.S. patent protection. Publication or oral presentation to third parties prior to the filing of a patent application will preclude foreign patenting.
  - (B) The term "first publication" means the first time any member of the general public (without restriction of confidentiality) would have been able to legally gain access to your written or printed detailed description of the invention. (For example, the date when a journal containing your description is first mailed to the public.)
  - (C) Reduction to practice occurs when an invention has been (1) embodied in some physical form which is (2) used to demonstrate its workability.
5.
  - (A) Give the applicable contract or grant number(s) if the invention was made in connection with any sponsored research. Indicate Principal Investigators by the notation P.I.
  - (B) Significant use of University-administered resources--whether funds or facilities--will normally give rise to University ownership rights in an invention. (For more details, you may request a copy of the University's Statute 20 Patents and Software policy from the Technology Center.)
6. Please provide a general description of the background research and pertinent prior work done in the field related to your invention. If possible, list five of the most relevant publications.
7. Please note all documents or forms in which your invention has been recorded or described to substantiate your invention's history, such as lab notes. Whenever possible, it is desirable to have a witness sign such documents. Actual documents may be requested if patent application is filed.
10. Please list names and telephone numbers of individuals who possess technical or marketing knowledge related to your potential application that could assist in the commercial evaluation of the invention.
11. All inventors must sign and date the disclosure form. Only persons other than co-inventors who understand the invention may serve as witnesses; departmental colleagues are excellent resources.

PLEASE SUBMIT ALL COPIES TO: The University of Chicago  
Technology Center  
970 E. 58th Street  
Chicago, IL 60637

Questions about the invention disclosure process, contact the Technology Center, Leonora Beck 702-8606.  
Questions about ARCH Development Corporation, contact Robert Nelsen, 702-0304.

2/90